

Global disparities in HPV vaccination

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Cervical cancer is the fourth most common cancer in women globally, but remains the second most common cancer (after breast cancer) in many low-income and middle-income countries, and is still more common than breast cancer in sub-Saharan Africa.¹ Most new cervical cancer cases (85%) and deaths (88%) occur in low-income and middle-income countries, where health systems are often fragmented or fragile, and where most have not yet implemented effective national cervical cancer screening programmes. Deaths from cervical cancer continue to be a largely preventable tragedy for more than 266 000 women and their families every year.¹

Since 2006, many countries have adopted national immunisation policies for human papillomavirus (HPV), and the work of GAVI, the Vaccine Alliance, and the Revolving Fund of the Pan American Health Organization, have created opportunities for many countries to access HPV vaccines at reduced prices. Under the auspices of GAVI and several civil society organisations, many girls have been immunised through demonstration projects. However, to what extent these efforts have led to improved immunisation coverage remains unclear.

In *The Lancet Global Health*, Laia Bruni and colleagues² shed new light on the status of national HPV immunisation programmes, and emphasise both the global disparities and the tremendous potential to vastly improve cervical cancer control, particularly in regions with high incidence and limited cervical cancer screening programmes.

The investigators developed a novel method to identify HPV immunisation programmes worldwide by combining systematic review of the literature and official web-based data, from which they retrieved age-specific vaccination coverage. These coverage rates were then converted into birth-cohort-specific rates, applied to country burden estimates, and presented in terms of cases and deaths averted, according to country income category. The investigators estimate that, although 118 million girls were targeted through HPV immunisation programmes from June, 2006, to October, 2014, only 1% were from low-income or lower-middle-income countries. Although 47 million (95% CI 39–55 million) girls and women

aged 10–20 years received the full course of vaccine, and 59 million (48–71 million) received at least one dose, only 2.7% (1.8–3.6) of these females were living in less developed regions. Therefore, countries with the highest burdens of disease remain largely unprotected.

The methods presented by Bruni and colleagues have limitations; however, manufacturer reports of 175 million doses distributed by 2014, suggest that their estimates are unlikely to be substantially imprecise. Better reporting by countries, and methods to objectively and independently validate these data, will be important going forward, and the investigators have developed an innovative approach to assist countries in tracking progress over time.

As the investigators emphasise, it is of utmost importance to make HPV vaccination more affordable everywhere, and to counter the pervasive myths about the safety of HPV vaccines. In addition to these efforts is the untapped potential to integrate HPV education and immunisation within adolescent health services, and within the broader framework of healthy lifestyle promotion. Such approaches are well aligned with the target in WHO's Global Action Plan for the Prevention and Control of Non-communicable Diseases (NCDs)³ for a 25% reduction in mortality from NCDs by 2025, and with the health-related targets of the Sustainable Development Goals to reduce by a third premature mortality from NCDs by 2030, and to improve access to safe and effective vaccines and to sexual and reproductive health services.⁴ Women with HIV have a four to five times increased risk of developing cervical cancer.⁵ As such, regions with a high HIV prevalence should aim to integrate HIV and HPV education and services, including cervical screening and treatment of precancerous lesions, while rapidly scaling up HPV immunisation programmes.

Also needed is better alignment, if not integration, between the advocacy movements for girls' and women's rights with those for women's cancers. The 2016 Women Deliver Conference held in Copenhagen, Denmark, was a great success, advancing the economic and political empowerment agenda, and advocating for the health and wellbeing of girls and women globally. However, a plenary session addressing HPV, cervical cancer, or NCDs more broadly was absent, despite this being the year of

For the **Women Deliver 2016** conference see <http://wd2016.org/>

the UN Secretary General's historic statement on World Cancer Day, in which he called for "the elimination of cervical cancer as a public health issue".⁶

The global cancer community has much to learn from the successful movements focused on women's empowerment, sexual and reproductive rights, maternal health, and HIV/AIDS. Likewise, these communities should embrace advocates for cervical and other women's cancers, rather than perceiving such groups as potential competitors for limited emotional and financial bandwidth. The time is long overdue for each to consider and engage the other as partners, colleagues, and collaborators to ensure—in the words of the new Every Women Every Child Global Strategy—that every woman and every child not only survives, but thrives.⁷

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I declare no competing interests. I am a staff member of WHO. I alone am responsible for the views expressed in this commentary and they do not necessarily represent the decisions, policy, or views of WHO.

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- 2 Bruni L, Diaz M, Barrionuevo-Rosas L, et al. Global estimates of human papillomavirus coverage by country and income level: a systematic review. *Lancet Glob Health* 2016; **4**: e453–63.
- 3 WHO. Global Action Plan for the Prevention and Control of NCDs 2012–2020. 2013. http://www.who.int/nmh/events/ncd_action_plan/en/ (accessed May 30, 2016).
- 4 UN Sustainable Development Goals. Goal 3: ensure healthy lives and promote well-being for all at all ages. <http://www.un.org/sustainabledevelopment/health/> (accessed May 30, 2016).
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- 6 UN. Secretary-General's message on World Cancer Day. Feb 4, 2016. <http://www.un.org/sg/statements/index.asp?nid=9437> (accessed May 30, 2016).
- 7 WHO. Global strategy for women's, children's and adolescent's health 2016–2030. <http://www.who.int/life-course/partners/global-strategy/en/> (accessed May 30, 2016).